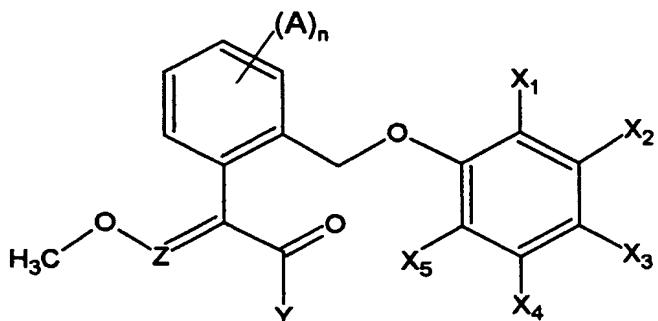


## CLAIMS

1. Compounds having general formula (I)



(I)

5 wherein:

- a group selected from X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> represents an R group;
- X<sub>4</sub> and X<sub>5</sub> and two of the remaining X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub> groups represent a hydrogen atom or a halogen atom, on the condition that at least two of said groups represent a halogen atom;
- R represents a C<sub>1</sub>-C<sub>12</sub> alkyl or haloalkyl group; a C<sub>1</sub>-C<sub>12</sub> alkoxy or alkylthio group optionally substituted by halogen atoms, cyano groups, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally halogenated, C<sub>2</sub>-C<sub>10</sub> alkoxyalkoxy groups optionally halogenated, NH<sub>2</sub> groups optionally substituted by C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally halogenated, C<sub>3</sub>-C<sub>12</sub> trialkyl silyl groups, aryloxy or heteroaryloxy groups, in turn optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally halogenated, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally

halogenated, nitro groups, cyano groups; a C<sub>2</sub>-C<sub>12</sub> alkenyloxy or alkenylthio group optionally substituted by halogen atoms, cyano groups, aryl groups or heteroaryl groups, in turn optionally substituted by halogen atoms,  
5 C<sub>1</sub>-C<sub>6</sub> alkyl, halo-alkyl, alkoxy, halo-alkoxy groups, nitro groups, cyano groups; a C<sub>3</sub>-C<sub>12</sub> alkinyloxy or alkinylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkoxy or haloalkoxy groups, aryl or heteroaryl groups, in turn optionally substituted by halogen  
10 atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups, nitro groups, cyano groups; a linear or branched C<sub>3</sub>-C<sub>12</sub> alkoxyiminoalkylidenoxy or alkoxyiminoalkylidentho group; a C<sub>3</sub>-C<sub>8</sub> cycloalkoxy or cycloalkylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, halo-  
15 alkyl, alkoxy, haloalkoxy groups; a C<sub>4</sub>-C<sub>12</sub> cycloalkylalkoxy or cycloalkylalkylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups; a heterocyclloxy, heterocyclthio, heterocycl-(C<sub>1</sub>-C<sub>6</sub>)alkoxy or heterocycl-(C<sub>1</sub>-C<sub>6</sub>)alkylthio  
20 group, optionally substituted by halogen atoms, (C<sub>1</sub>-C<sub>6</sub>) alkyl, haloalkyl, alkoxy, haloalkoxy groups; an aryloxy, arylthio, hetero-aryloxy, heteroarylthio, aryl-(C<sub>1</sub>-C<sub>6</sub>)alkoxy, aryl-(C<sub>1</sub>-C<sub>6</sub>)alkylthio, heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkoxy or heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkylthio group optionally substi-  
25 tuted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally

halogenated, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally halogenated, nitro groups, cyano groups;

- A, the same or different, when n is greater than or equal to 2, represents a halogen atom or a C<sub>1</sub>-C<sub>4</sub> alkyl,

5 haloalkyl, alkoxy, haloalkoxyl group;

- Y represents an OCH<sub>3</sub> group, an NHCH<sub>3</sub> group, an NH<sub>2</sub> group;

- Z represents a CH group or a nitrogen atom N;

- n is an integer ranging from 0 to 4.

10 2. The compounds according to claim 1, characterized in that they are an isomeric mixture in any proportion, or the isomer E or the isomer Z of the compounds having formula (I).

15 3. The compounds according to claim 1, characterized in that they are the isomer E of the compounds having formula (I).

4. The compounds according to claim 1, characterized in that X<sub>3</sub> represents an R group according to the above mentioned meanings, X<sub>2</sub> and X<sub>4</sub> represent a halogen atom, X<sub>1</sub> 20 and X<sub>5</sub> represent a hydrogen atom and n is equal to 0.

5. The compounds according to claim 1, characterized in that they are selected from:

- methyl (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxyethyl)phenyl]-3-methoxyacrylate;

25 - methyl (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxyethyl)phenyl]-3-methoxyacrylate;

oxymethyl)phenyl]-2-methoxyiminoacetate;

- (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxy-methyl)phenyl]-N-methyl-2-methoxyiminoacetamide;

- methyl (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-dichlorophenoxy]phenyl}-3-methoxyacrylate;

- methyl (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-dichlorophenoxy]phenyl}-2-methoxyiminoacetate;

- (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-dichlorophenoxy]phenyl}-N-methyl-2-methoxyiminoacet-

10 amide;

- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]phenyl}-3-methoxyacrylate;

- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]phenyl}-2-methoxyiminoacetate;

15 - (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]phenyl}-N-methyl-2-methoxyiminoacetamide;

- methyl (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-2-enyloxy)phenoxy]phenyl}-3-methoxyacrylate;

20 - methyl (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-2-enyloxy)phenoxy]phenyl}-2-methoxyiminoacetate;

- (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-2-enyloxy)phenoxy]phenyl}-N-methyl-2-methoxyimino-

25 acetamide;

- methyl (E)-2-[2-(4-cyclobutylmethoxy-3,5-dichlorophenoxyethyl)phenyl]-3-methoxyacrylate;
- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dimethylbutoxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

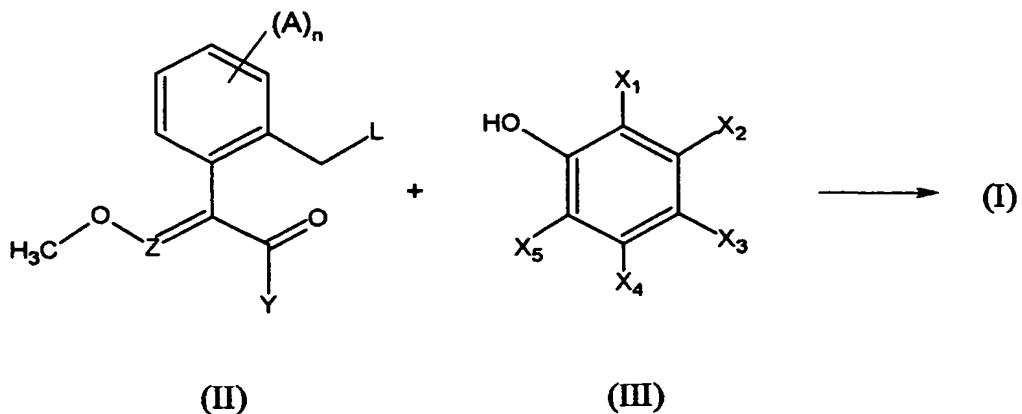
5 - methyl (E)-2-{2-[3,5-dichloro-4-(3-methylbutoxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

- methyl (E)-2-[2-(4-cyclohexylmethoxy-3,5-dichlorophenoxyethyl)phenyl]-3-methoxyacrylate;
- methyl (E)-2-{2-[3,5-dichloro-4-(2,4-dichlorobenzyloxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

10 - methyl (E)-2-{2-[3,5-dichloro-4-(4-chlorobenzyloxy)phenoxyethyl]phenyl}-3-methoxyacrylate.

6. The process for the preparation of the compounds having general formula (I), according to any of the  
15 claims 1-5, characterized in that it includes a condensation reaction of a compound having general formula (II) with a phenol having general formula (III), according to the reaction scheme 1:

Scheme 1



wherein , X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub>, X<sub>5</sub>, A, Y, Z and n have the meanings defined above, L represents a leaving group such as a chlorine atom, a bromine atom or a R<sub>L</sub>SO<sub>3</sub><sup>-</sup> group wherein 5 R<sub>L</sub> represents a C<sub>1</sub>-C<sub>6</sub> alkyl or haloalkyl, or a phenyl optionally substituted.

7. The process according to claim 6, characterized in that the reaction is carried out in an inert organic solvent, at a temperature ranging from 0°C and the boiling 10 temperature of the reaction mixture, possibly in the presence of an inorganic or organic base.

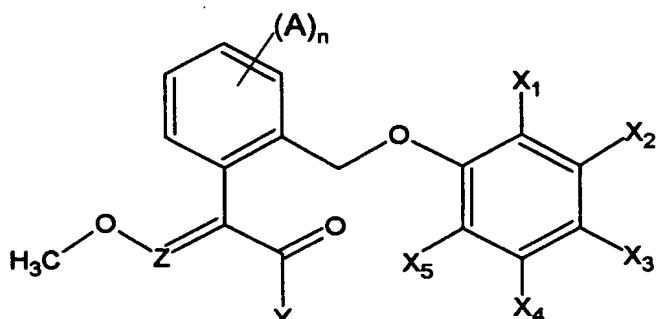
8. The process according to claim 7, characterized in that the solvent is selected from alcohols, ethers, esters, ketones, chlorinated hydrocarbons, aromatic hydrocarbons, aliphatic hydrocarbons, aprotic dipolar solvents. 15

9. The process according to claim 7, characterized in that the inorganic base is selected from hydrides, hy-

droxides, carbonates of alkaline or alkaline-earth metals.

10. The process according to claim 7, characterized in that the organic base is selected from pyridine, dimethylaminopyridine, aliphatic amines, cyclic amines, alcohohalates of alkaline metals.

11. Use of the compounds having general formula (I)



10 wherein:

- a group selected from X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> represents an R group;
- X<sub>4</sub> and X<sub>5</sub> and two of the remaining X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub> groups represent a hydrogen atom or a halogen atom, on the condition that at least two of said groups represent a halogen atom;
- R represents a C<sub>1</sub>-C<sub>12</sub> alkyl or haloalkyl group; a C<sub>1</sub>-C<sub>12</sub> alkoxy or alkylthio group optionally substituted by halogen atoms, cyano groups, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally halogenated, C<sub>2</sub>-C<sub>10</sub> alkoxyalkoxy groups optionally halo-

generated, NH<sub>2</sub> groups optionally substituted by C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally halogenated, C<sub>3</sub>-C<sub>12</sub> trialkyl silyl groups, aryloxy or heteroaryloxy groups, in turn optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally halogenated, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally halogenated, nitro groups, cyano groups; a C<sub>2</sub>-C<sub>12</sub> alkenyloxy or alkenylthio group optionally substituted by halogen atoms, cyano groups, aryl groups or heteroaryl groups, in turn optionally substituted by halogen atoms, 5 C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups, nitro groups, cyano groups; a C<sub>3</sub>-C<sub>12</sub> alkinyloxy or alkinylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkoxy or haloalkoxy groups, aryl or heteroaryl groups, in 10 turn optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups, nitro groups, cyano groups; a linear or branched C<sub>3</sub>-C<sub>12</sub> alkoxyiminoalkylidenoxy or alkoxyiminoalkylidenthio group; a C<sub>3</sub>-C<sub>8</sub> cycloalkoxy or cycloalkylthio group optionally substituted 15 by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups; a C<sub>4</sub>-C<sub>12</sub> cycloalkylalkoxy or cycloalkylalkylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl, haloalkyl, alkoxy, halo-alkoxy groups; a 20 heterocyclxy, heterocyclthio, heterocycl(C<sub>1</sub>-C<sub>6</sub>)alkoxy or hetero-cycl(C<sub>1</sub>-C<sub>6</sub>)alkylthio group, optionally substituted by halogen atoms, (C<sub>1</sub>-C<sub>6</sub>) alkyl, haloal- 25

kyl, alkoxy, halo-alkoxy groups; an aryloxy, arylthio, heteroaryloxy, heteroarylthio, aryl-(C<sub>1</sub>-C<sub>6</sub>)alkoxy, aryl-(C<sub>1</sub>-C<sub>6</sub>)alkylthio, heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkoxy or heteroaryl-(C<sub>1</sub>-C<sub>6</sub>)alkylthio group optionally substituted by halogen atoms, C<sub>1</sub>-C<sub>6</sub> alkyl groups optionally halogenated, C<sub>1</sub>-C<sub>6</sub> alkoxy groups optionally halogenated, nitro groups, cyano groups;

5 - A, the same or different, when n is greater than or equal to 2, represents a halogen atom or a C<sub>1</sub>-C<sub>4</sub> alkyl, haloalkyl, alkoxy, haloalkoxy group;

10 - Y represents an OCH<sub>3</sub> group, an NHCH<sub>3</sub> group, an NH<sub>2</sub> group;

- Z represents a CH group or a nitrogen atom N;

- n is an integer ranging from 0 to 4;

15 as acaricides and/or insecticides and/or fungicides.

12. The use according to claim 11 of the isomers E of the compounds having formula (I).

13. The use according to claim 11, wherein X<sub>3</sub> represents an R group according to the above meanings, X<sub>2</sub> and X<sub>4</sub> represent a halogen atom, X<sub>1</sub> and X<sub>5</sub> represent a hydrogen atom and n is equal to 0.

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14. The use according to claim 11, wherein the compounds of formula (I) are selected from:

- methyl (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxy)methyl]phenyl]-3-methoxyacrylate;

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- methyl (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxy)methyl]phenyl]-2-methoxyiminoacetate;
- (E)-2-[2-(4-cyclopropylmethoxy-3,5-dichlorophenoxy)methyl]phenyl]-N-methyl-2-methoxyiminoacetamide;

5 - methyl (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-dichlorophenoxy]methyl}phenyl}-3-methoxyacrylate;

- methyl (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-dichlorophenoxy]methyl}phenyl}-2-methoxyiminoacetate;
- (E)-2-{2-[4-(2,2-dichlorocyclopropyl)methoxy-3,5-di-

10 chlorophenoxy]methyl}phenyl]-N-methyl-2-methoxyiminoacetamide;

- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]methyl}phenyl}-3-methoxyacrylate;
- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]methyl}phenyl}-2-methoxyiminoacetate;

15 - (E)-2-{2-[3,5-dichloro-4-(3,3-dichloroprop-2-enyloxy)phenoxy]methyl}phenyl}-N-methyl-2-methoxyiminoacetamide;

- methyl (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-2-enyloxy)phenoxy]methyl}phenyl}-3-methoxy-

20 acrylate;

- methyl (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-2-enyloxy)phenoxy]methyl}phenyl}-2-methoxyiminoacetate;
- (E)-2-{2-[3,5-dichloro-4-(3-chloro-4,4,4-trifluorobut-

25 2-enyloxy)phenoxy]methyl}phenyl}-N-methyl-2-methoxyimino-

acetamide;

- methyl (E)-2-[2-(4-cyclobutylmethoxy-3,5-dichloro-phenoxyethyl)phenyl]-3-methoxyacrylate;

- methyl (E)-2-{2-[3,5-dichloro-4-(3,3-dimethylbutoxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

- methyl (E)-2-{2-[3,5-dichloro-4-(3-methylbutoxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

- methyl (E)-2-[2-(4-cyclohexylmethoxy-3,5-dichlorophenoxyethyl)phenyl]-3-methoxyacrylate;

10 - methyl (E)-2-{2-[3,5-dichloro-4-(2,4-dichlorobenzyloxy)phenoxyethyl]phenyl}-3-methoxyacrylate;

- methyl (E)-2-{2-[3,5-dichloro-4-(4-chlorobenzyloxy)phenoxyethyl]phenyl}-3-methoxyacrylate.

15. The use according to any of the claims 11-14 for the control of adults, larvae and eggs of mites and insects which are harmful in the agrarian, civil and zootechnical field.

16. The use according to claim 15, wherein the harmful mites and/or insects are tetranychidae (*Tetranychus urticae*, *Tetranychus telarius*, *Tetranychus cinnabarinus*, *Eotetranychus carpini*, *Panonychus ulmi*, *Panonychus citri*, etc.), eriophyidae (*Phytoptus avellanae*, *Eriophyes vitis*, *Eriophyes piri*, etc.) tarsonemidae (*Steneotarsonemus pallidus*, etc.), hemiptera (*Macrosiphum euphorbiae*, *Aphis fabae*, *Myzus persicae*, etc.), lepidoptera (*Spodoptera*

spp., *Heliothis* spp., *Chilo* spp., *Carpocapsa pomonella*, etc.), coleoptera (*Leptinotarsa decemlineata*, *Phaedon cochleariae*, etc.), diptera (*Aedes* spp., *Culex* spp., *Musca* spp., etc.).

5 17. The use according to any of the claims 11-14 for the control of phytopathogenous fungi such as: *Helminthosporium* spp., *Erysiphe* spp., *Puccinia* spp., *Plasmopara viticola*, *Pythium* spp., *Phytophthora* spp., *Rhynchosporium* spp., *Septoria* spp., *Sphaerotheca fuliginea*, *Podosphaera leucotricha*, *Pyricularia oryzae*, *Uncinula necator*, *Venturia* spp., *Botrytis cinerea*, *Fusarium* spp., *Alternaria* spp., *Cercospora* spp.

18. The use according to any of the claims 11-14 for the control of mites, insects and fungi which are harmful in crops of agrarian and horticultural interest, on domestic and breeding animals, in environments frequented by human beings.

19. A method for controlling mites and/or insects and/or phytopathogenous fungi in crops of agrarian and horticultural interest, and/or on domestic and breeding animals, and/or in environments frequented by human beings, by the application of the compounds having general formula (I) according to one of the claims 1-5.

20. The method according to claim 19, characterized in that the quantity of compound to be applied varies from

10 g to 5 kg per hectare.

21. Acaricidal and/or insecticidal and/or fungicidal compositions containing as active principle one or more compounds having general formula (I) according to one of 5 the claims 1-5.

22. The compositions according to claim 21, comprising other active principles compatible with the compounds having general formula (I), such as other acaricides/insecticides, fungicides, phyto-regulators, anti-10 biotics, herbicides, fertilizers.

23. The compositions according to claim 21, characterized in that the concentration of active principle ranges from 1 to 90%, preferably from 5 to 50%.